

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(currently amended)** A method of spraying coating liquid, said method comprising the steps of:

spraying the coating liquid in form of a spray jet from a liquid atomizer of a spray system onto an object to be coated; and

controlling a property of said spray jet by metering an accessory liquid into the spray jet; wherein

said accessory liquid being metered into said spray jet at a location outside said liquid atomizer; and

said coating liquid is a solution of a solvent and said accessory liquid is said solvent.

2. (previously presented) The method as claimed in claim 1, wherein said metering comprises depositing the accessory liquid to a starting zone of the spray jet before said spray jet attains its full diameter.

3. (previously presented) The method as claimed in claim 1, wherein said liquid atomizer has a front end from which said spray jet begins to travel toward the object to be coated; and

said metering comprises depositing said accessory liquid into said spray jet at said front end or at a location in a downstream vicinity of said front end.

4. (previously presented) The method as claimed in claim 1, wherein said metering comprises depositing the accessory liquid into the spray jet at a number of locations outside the liquid atomizer, said locations being distributed circumferentially over at least a portion of said spray jet.

5. **(currently amended)** A method of spraying coating liquid, said method comprising the steps of:

spraying the coating liquid in form of a spray jet from a liquid atomizer of a spray system onto an object to be coated; and

controlling the microclimate in said spray jet by metering an accessory liquid into the spray jet;

wherein said metering comprises

depositing at least a portion of the accessory liquid on an external surface ~~externally peripheral terminal zone~~ of the liquid atomizer; and

using the external surface of said atomizer to guide said portion of the accessory liquid into the spray jet.

6. (previously presented) The method as claimed claim 1, wherein said metering comprises depositing the accessory liquid from at least one nozzle aperture which is configured at a front end segment of the spray system, in form of an unbroken jet, to the spray jet.

7. **(currently amended)** A method of spraying coating liquid, said method comprising the steps of:

spraying the coating liquid in form of a spray jet from a liquid atomizer of a spray system onto an object to be coated; and

controlling a property of said spray jet by metering an accessory liquid into the spray jet;

wherein

said accessory liquid being metered into said spray jet at a location outside said liquid atomizer;

~~The method as claimed in claim 1, wherein~~

the liquid atomizer is a rotary atomizing element, said atomizing element having a front end facing the object, the front end having an external surface, an internal surface that defines an inner passage for delivering the coating liquid, and an atomizing edge at the boundary of the internal and external surfaces; and

said metering comprises dripping the accessory liquid onto the external surface of the atomizing element.

8. (previously presented) A method of spraying coating liquid, said method comprising the steps of:

spraying the coating liquid in form of a spray jet from a liquid atomizer of a spray system onto an object to be coated; and

controlling the microclimate in said spray jet by metering an accessory liquid into the spray jet;

wherein

said spray system further includes a system component in contact with the coating liquid being delivered to be sprayed in form of said spray jet; and

said method further comprises the step of cooling said system component by a fluidic and cooled coolant, thereby cooling the coating liquid by virtue of thermal conductivity of the system component.

9. **(currently amended)** A coating-liquid spray system, comprising:

a liquid atomizer for spraying a coating liquid in form of a spray jet onto an object to be coated, said liquid atomizer having a front end adapted to face the object to be coated, the front end having an external surface, an internal surface that defines an inner passage for delivering the

coating liquid, and an atomizing edge at the boundary of the internal and external surfaces from which atomizing edge the spray jet begins to travel toward the object in operation; and

an accessory-liquid feed unit fitted with at least one discharge outlet for metering an accessory liquid into the spray jet;

wherein

said at least one discharge outlet is located outside said inner passage; and

said at least one discharge outlet points towards a location on the external surface of said front end of said liquid atomizer, said location being rearwardly spaced from said atomizing edge, thereby allowing the accessory liquid to be deposited on the external surface and to be guide by the external surface forwardly into the spray jet.

10-11. (canceled)

12. (previously presented) The system as claimed in claim 9, wherein the accessory-liquid feed unit includes several said discharge outlets positioned radially outwardly from the external surface of the front end and circumferentially of said front end to feed the accessory liquid at several locations around the spray jet into this jet.

13. (canceled)

14. (previously presented) The system as claimed in claim 9, wherein at least one said discharge outlet of the accessory liquid is located radially, outwardly with respect to the external surface of the front end.

15. (previously presented) The system as claimed in claim 14, wherein
the liquid atomizer is a rotary atomizing element; and
the accessory-liquid feed unit is configured to drip the accessory liquid onto the external

surface of the front end of the rotary atomizing element.

16. (previously presented) The system as claimed in claim 14, wherein the accessory-liquid feed unit is configured to deliver the accessory liquid in the form of a continuous jet from at least one said discharge outlet.

17. (previously presented) A coating-liquid spray system, comprising:
a liquid atomizer for spraying a coating liquid in form of a spray jet onto an object to be coated;
an accessory-liquid feed unit fitted with at least one discharge outlet for metering an accessory liquid into the spray jet; and
a cooling unit for cooling at least one component of the spray-system by means of a fluid, cooled coolant, said system component being adapted to be in contact with the coating liquid being delivered to be sprayed in form of said spray jet and having a thermal conductivity in order to cool the coating liquid with the coolant.

18. (previously presented) The system as claimed in claim 17, wherein the system component comprises
a first portion which is adapted to be in contact with the coating liquid being delivered to be sprayed in form of said the spray jet; and
a second portion which is not adapted to be in contact with the spray-coating liquid being delivered to be sprayed in form of said the spray jet;
wherein the cooling unit is configured to discharge the coolant on the second portion of the system component.

19. (previously presented) The system as claimed in claim 18, wherein the liquid atomizer is a rotary atomizing element and the first portion adapted to be in contact with the coating

liquid is an external, peripheral surface of the rotary atomizing element.

20. (previously presented) The system as claimed in claim 17, wherein the coolant is a cooled gas.

21. (previously presented) The method of claim 1, wherein said metering is performed during said spraying.

22. (new) The method of claim 1, wherein said solvent is water.

23. (new) The method of claim 1, wherein said metering comprises atomizing said accessory liquid.

24. (new) The method of claim 1, wherein said spray system further includes a system component in contact with the coating liquid being delivered to be sprayed in form of said spray jet; said method further comprising the step of cooling said system component by a fluidic and cooled coolant, thereby cooling the coating liquid by virtue of thermal conductivity of the system component.

25. (new) The method of claim 8, wherein said controlling comprises adjusting at least one of temperature, moisture content, viscosity of said spray jet by said accessory liquid.

26. (new) A method of spraying coating liquid, said method comprising the steps of: spraying the coating liquid in form of a spray jet from a liquid atomizer of a spray system onto an object to be coated; and controlling a property of said spray jet by metering an accessory liquid into the spray jet; wherein

said accessory liquid being metered into said spray jet at a location outside said liquid atomizer;

said metering is performed during said spraying; and

said coating liquid is paint and said metering comprises thinning said paint by said accessory liquid.

27. **(new)** The system as claimed in claim 9, wherein said at least one discharge outlet comprises an elongated slotted nozzle describing an arc extending peripherally of the atomizing edge.

28. **(new)** The system as claimed in claim 9, wherein said at least one discharge outlet comprises an elongated slotted nozzle completely enclosing the atomizing edge.